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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,336	02/13/2006	Mikio Fukuda	SAIT4480	3346

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EXAMINER	
GUZMAN, APRIL S	
ART UNIT	PAPER NUMBER
2618	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,336	FUKUDA, MIKIO	
	Examiner	Art Unit	
	April S. Guzman	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 February 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02/13/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement submitted on 02/13/2006 has been considered by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lee et al. (WO 2004/032566 A1)** in view of **Kim et al. (WO 2002/19759 A1)**.

Consider **claim 1**, Lee et al. teach a portable telephone using a bone conduction device serving as a speaker and/or a microphone, characterized in that: a concave portion, which is larger in diameter than said bone conduction device, is formed in a housing of a main body of the telephone; a material is disposed between an inner surface of said concave portion and an outer

surface of said bone conduction device; and, a gap is formed and kept effective between said bone conduction device and a bottom surface of said concave portion by means of said cushioning material, through which material said bone conduction device is supported and has its vibration surface slightly extended outward from a surface of said housing (Figure 1, Figure 5, page 10 lines 11-25, page 11 lines 1-17, and page 12 lines 3-13).

However, Lee et al. fail to teach a cushioning material is disposed between an inner surface of said concave portion and an outer surface of said bone conduction device.

In the related art, Kim et al. teach a cushioning material is disposed between an inner surface of said concave portion and an outer surface of said bone conduction device (Figure 3, page 9 lines 3-13, and page 11 lines 6-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kim et al. into the teachings of Lee et al. for the purpose of enhancing the shock-absorbing efficiency and to control the vibrating characteristics of the bone conduction device.

Consider **claim 2**, Lee et al. teach a portable telephone using a bone conduction device serving as a speaker and/or a microphone, characterized in that: a through-hole portion, which is larger in diameter than said bone conduction device, is formed in a housing of a main body of the telephone; a material is disposed between an inner surface of said through-hole portion and an outer surface of said bone conduction device; and, said bone conduction device has its vibration surface slightly extended outward from a surface of said housing by means of said material.

However, Lee et al. fail to teach a cushioning material is disposed between an inner surface of said through-hole portion and an outer surface of said bone conduction device.

In the related art, Kim et al. teach a cushioning material is disposed between an inner surface of said through-hole portion and an outer surface of said bone conduction device (Figure 3, page 9 lines 3-13, and page 11 lines 6-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kim et al. into the teachings of Lee et al. for the purpose of enhancing the shock-absorbing efficiency and to control the vibrating characteristics of the bone conduction device.

Consider **claim 3, as applied to claim 2 above**, Lee et al. as modified by Kim et al. further teach wherein both the opposite surfaces of said bone conduction device serve as vibration surfaces (Lee et al. – Figure 1, Figure 5, page 10 lines 23-25, page 11 lines 1-5, page 11 lines 9-17; Kim et al. – page 9 lines 3-13).

Consider **claim 7**, Lee et al. teach a portable telephone using a bone conduction device, wherein: said bone conduction device is installed in a device installation opening of a housing of said bone conduction device (Figure 1, and page 10 lines 11-22).

However, Lee et al. fail to teach a device holder made of resilient material; and, said device holder is constructed of a container portion and a fixing portion, wherein said container portion carries said bone conduction device therein, wherein said fixing portion is fixedly mounted on an inner surface of said housing of a main body of the telephone.

In the related art, Kim et al. teach a device holder made of resilient material; and, said device holder is constructed of a container portion and a fixing portion, wherein said container portion carries said bone conduction device therein, wherein said fixing portion is fixedly

mounted on an inner surface of said housing of a main body of the telephone (Figure 2, Figure 3, page 6 lines 28-32, and page 7 lines 1-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kim et al. into the teachings of Lee et al. for the purpose of enhancing the shock-absorbing efficiency and to control the vibrating characteristics of the bone conduction device while its structure is simplified.

Consider **claim 8, as applied to claim 7 above**, Lee et al. as modified by Kim et al. further teach wherein an abutting plate, which is fixedly mounted on said bone conduction device to cover a front surface side of said container portion, is so arranged as to slightly extend outward from said housing (Lee et al. – Figure 1, Figure 5, page 10 lines 11-25, and page 11 lines 1-17).

Consider **claim 9, as applied to claim 8 above**, Lee et al. as modified by Kim et al. further teach wherein a circular rib for receiving therein a peripheral edge portion of a rear surface of said abutting plate is provided in a front surface side of said container portion (Kim et al. - Figure 2, Figure 3, and page 7 lines 7-26).

Claims 4-5, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lee et al. (WO 2004/032566 A1)** in view of **Kim et al. (WO 2002/19759 A1)**, and further in view of **Mizuta et al. (U.S. Patent Application Publication # 2003/0064758 A1)**.

Consider **claim 4, as applied to claim 1 above**, Lee et al. as modified by Kim et al. further teach the portable telephone using the bone conduction device.

However, Lee et al. as modified by Kim et al. fail to teach wherein: the portable telephone is of a foldable type provided with a housing constructed of two housing portions

foldable relative to each other in a folded position of the telephone; and, in such a folded position of the telephone, said vibration surface of said bone conduction device abuts on an inner surface of one of said housing portions, which one is oppositely disposed from the other one of said housing portions, said the other one carrying said bone conduction device of said housing.

In the related art, Mizuta et al. teach wherein: the portable telephone is of a foldable type provided with a housing constructed of two housing portions foldable relative to each other in a folded position of the telephone; and, in such a folded position of the telephone, said vibration surface of said bone conduction device abuts on an inner surface of one of said housing portions, which one is oppositely disposed from the other one of said housing portions, said the other one carrying said bone conduction device of said housing (Abstract, Figure 4B, Figure 9A, Figure 9B, [0024], [0073]-[0080], and [0082]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Mizuta et al. into the teachings of Lee et al. as modified by Kim et al. for the purpose of improving operability and providing that the upper unit and lower unit are connected to be able to be freely opened and closed in the plane surface direction.

Consider **claim 5, as applied to claim 1 above**; **claim 10, as applied to claim 1 above; claim 11, as applied to claim 2 above; and claim 12, as applied to claim 3 above,** Lee et al. as modified by Kim et al. further teach the portable telephone using the bone conduction device.

However, Lee et al. as modified by Kim et al. fail to teach wherein: the portable telephone is of a rotatable type provided with a housing constructed of two housing portions rotatable relative to each other in a closed position of the telephone; and, in such a closed

position of the telephone, said vibration surface of said bone conduction device abuts on an inner surface of one of said housing portions, which one is oppositely disposed from the other one of said housing portions, said the other one carrying said bone conduction device of said housing.

In the related art, Mizuta et al. teach wherein: the portable telephone is of a rotatable type provided with a housing constructed of two housing portions rotatable relative to each other in a closed position of the telephone; and, in such a closed position of the telephone, said vibration surface of said bone conduction device abuts on an inner surface of one of said housing portions, which one is oppositely disposed from the other one of said housing portions, said the other one carrying said bone conduction device of said housing (Figure 4B, Figure 9A, Figure 9C, Figure 9D, [0025], [0074]-[0080], and [0082]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Mizuta et al. into the teachings of Lee et al. as modified by Kim et al. for the purpose of improving operability and providing that the upper unit and lower unit are connected to be able to be freely rotatable in the rotational axis approximately perpendicular to the operation surface.

Claims 6, and 13-15 rejected under 35 U.S.C. 103(a) as being unpatentable over **Lee et al. (WO 2004/032566 A1)** in view of **Kim et al. (WO 2002/19759 A1)**, and further in view of **Kaneko (U.S. Patent Application Publication # 2003/0162560 A1)**.

Consider **claim 6, as applied to claim 1 above; claim 13, as applied to claim 1 above; claim 14, as applied to claim 2 above; and claim 15, as applied to claim 3 above,** Lee et al. as modified by Kim et al. further teach the portable telephone using the bone conduction device.

However, Lee et al. as modified by Kim et al. fail to teach wherein: the portable telephone is of a slidable type provided with a housing constructed of two housing portions slidable relative to each other in a closed position of the telephone; and, in such a closed position of the telephone, said vibration surface of said bone conduction device abuts on an inner surface of one of said housing portions, which one is oppositely disposed from the other one of said housing portions, said the other one carrying said bone conduction device of said housing.

In the related art, Kaneko teaches wherein: the portable telephone is of a slidable type provided with a housing constructed of two housing portions slidable relative to each other in a closed position of the telephone; and, in such a closed position of the telephone, said vibration surface of said bone conduction device abuts on an inner surface of one of said housing portions, which one is oppositely disposed from the other one of said housing portions, said the other one carrying said bone conduction device of said housing (Figure 6A, Figure 6B, [0034], and [0072]-[0076]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kaneko into the teachings of Lee et al. as modified by Kim et al. for the purpose of providing a slide cellular phone providing excellent usability wherein a second case which slides with respect to the first case is pulled out to position in the closed status or a pulled out status.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see PTO-892 Notice of Reference Cited).

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April S. Guzman whose telephone number is 571-270-1101. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April S. Guzman
A.S.G/asg

03/22/07

EDAN ORGAD
PRIMARY PATENT EXAMINER

3/20/07